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## CERTIFICATE

Of Presentation

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## INTERNATIONAL CONFERENCE ON INNOVATIVE RESEARCH IN SCIENCE, TECHNOLOGY & MANAGEMENT

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VENUE :- NUS, SINGAPORE

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# International Conference on Innovative Research in Science, Technology & Management

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IRP would like to express our gratitude towards all those who invested their time, energy and intellect to host and manage this conference. Specially, IRP thank the chairs, who were working on a voluntary basis for a whole year to make this conference a success. IRP would also like to thank the 120+ presenters who presented their research and gave us overwhelming response. Finally, IRP would like to thank the management of NUS for their amazing support in this endeavor

## INDEXED BY

Space is the boundless, three dimensions occur and have relative positions. In three linear dimensions, consider it, with time, to be four dimensions.



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# BIOCHEMISTRY ANALYSIS OF NUTRIENTS AND BACTERIOLOGY CHARACTERISTICS OF INDONESIAN DADIH

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## Abstract

Dadih, Indonesian traditional fermented buffalo milk, is produced and consumed by the West Sumatra Minang kabau ethnic group of Indonesia that considered beneficial for human health. Natives named it dadiah, and it is extremely popular dairy product in some district in West Sumatra province, Indonesia have been reported to consist of pro biotic bacteria that benefit to prevention and treatment of obesity when consumed alive and in adequate amount. The objective of this study was to know Biochemistry and Bacteriology Characteristics dadih that collected from several areas in West Sumatera province, Indonesia.

This study initiated with analysis of biochemistry composition of dadih that collected from 2 areas, Agam and Tanah Datar in West Sumatera province, Indonesia. Biochemical analysis is covering protein, lipid and water composition, amino acid and micronutrients. Bacteriology analysis has conducted to total bacterial and total Acid Lactic Bacterial (BAL) quantification.

In this study, we have found several datas. Total percentage of protein, lipid and water of dadih from Agam respectively are 10.89%±2.55, 18.00%±14.65 and 61.94%±20.18. Total percentage of protein, lipid and water of dadih from Tanah Datar respectively are 12.41%±1.30, 5.70%±1.73, 66.09%±6.00. Lysin and Leucyn is most essential amino acids from 2 areas, that are respectively 7.6 and 6.6 mg/g from dadih Agam district, and 6.8 and 6.2 mg/g from dadih Tanah Datar district. The most non essential amino acid in Agam and Tanah Datar district is glutamic acid, respectively are 16.8 and 15.6 mg/g. Calcium, Iodium and Zinc are most micronutrient in dadih, their concentration respectively 190.54 mg/100 g, 15.93 mcg/100 g, and 7,03 ppm in dadih Agam district, while the Calcium, Iodium and Zinc in the Tanah Datar district respectively are 247.93 mg/100 g, 16.39 mcg/100 g, and 9.27 ppm. Dadih from Agam contain 2.9 x 10<sup>8</sup> CFU/g total bacteria and 4.6 x 10<sup>6</sup> CFU/g BAL. Dadih from Tanah Datar contain 2.3 x 10<sup>7</sup> CFU/g total bacteria and 1.9 x 10<sup>7</sup> CFU/g BAL. There are no pathogenic bacteria in dadih Agam and Tanah Datar.

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**Keyword** - biochemistry, bacteriology, nutrients, dadih, West Sumatera Indonesia

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